

SUPPORT FOR THE AMENDMENT

This Amendment cancels Claim 7; amends Claims 1-6 and 8-20; and adds new Claim 21. Support for the amendments is found in the specification and claims as originally filed. In particular, support for Claim 21 ("150°C") is found in the specification at least at page 4, lines 28-29. No new matter would introduced by entry of these amendments.

Upon entry of these amendments, Claims 1-6 and 8-21 will be pending in this application. Claim 1 is independent.

REQUEST FOR RECONSIDERATION

Applicants respectfully request entry of the foregoing and reexamination and reconsideration of the application, as amended, in light of the remarks that follow.

Applicants thank the Examiner for the courtesies extended to their representative during the personal interview on June 11, 2008.

As discussed at the personal interview, the present invention provides a gentle and economical process for removing halide compounds adhering to finely divided, pyrogenically prepared metal oxide particles. Specification at page 1, lines 3-5, page 2, lines 19-22.

Claims 1-20 are rejected under 35 U.S.C. § 103(a) over GB 1,197,271 ("GB-271") in view of U.S. Patent No. 6,328,944 ("Mangold").

GB-271 discloses a process for the purification of finely divided metal oxide particle, in which metal oxide particles and steam or steam and air are passed countercurrently through a vertical column. Specification at page 1, lines 28-31; GB-271 at page 1, lines 12-19. GB-271 discloses that the temperature in the column is 400 to 600°C. GB-271 at, e.g., page 2, lines 96-100.

The Office Action at page 3, lines 20-21, admits the "GB'271 is silent in regard to the temperature difference between the bottom and the top of the column". However, the Office Action asserts that this feature is inherent in GB-271.

In regard to the temperature difference, GB'271 teaches providing heat in two vertically adjacent burners at the lower end of the treatment zone (the bottom). See **page 3, lines 8-17**. Thus, a temperature gradient would be produced, with a higher temperature at the bottom of the column and a lower temperature at the top. In a reaction column of sufficient size like the 300 L tube used in Example 1, and with the feeding rates of Example 1, a **temperature difference** between the top of the column and the bottom of at least 20°C would *necessarily* be produced. Office Action at page 4, lines 13-19 (emphasis added).

Yet GB-271 at page 3, lines 8-17, discloses:

The treatment temperature may be maintained by means of an externally mounted electrical resistance heating system or alternatively by an internal heating system in which hydrogen is burnt in two vertically adjacent **burners at the lower end of the treatment zone**, the burners being screened to prevent oxide from passing into the flame zone. In the latter case combustion of hydrogen provides steam for the treatment [sic]. GB-271 at page 3, lines 8-17 (emphasis added).

GB-271 further discloses that an ascending stream of a mixture of steam and a gas which is inert to oxide is preheated to about 120°C. GB-271 at column 2, lines 66-69.

GB-271 discloses that the "temperature of the combustion gases, nitrogen and steam, ascending **through** the treatment zone, is about 600°C". GB-271 at column 3, lines 117-120 (emphasis added).

However, GB-271 does not disclose a temperature range, the bottom temperature being higher than the temperature at the top.

Mangold fails to remedy the deficiencies of Mangold. The Office Action cites Mangold for disclosing densities of silicon dioxide particles produced by flame hydrolysis. Office Action at page 3, line 24 to page 4, line 12.

Thus, the cited prior art fails to suggest the independent Claim 1 limitation that "the column is heated in such a manner that the temperature difference $T_{\text{bottom}} - T_{\text{top}}$ between the lower part and the upper part of the column is at least 20°C".

The cited prior art gives no hint that independent Claim 1's temperature difference in combination with Claim 1's residence time in the column would produce a powder having a positive effect on the thickening action (see specification at page 8, Table).

Thus, the rejection under 35 U.S.C. § 103(a) should be withdrawn.

New Claim 21 is further patentably distinguishable over the cited prior art, because the cited prior art fails to suggest the limitation that "a maximum temperature of 150°C prevails in the column".

Claim 7 is rejected under 35 U.S.C. § 112, second paragraph. Claim 7 is canceled, so the rejection is moot and should be withdrawn.

In view of the foregoing amendments and remarks, Applicants respectfully submit that the application is in condition for allowance. Applicants respectfully request favorable consideration and prompt allowance of the application.

Should the Examiner believe that anything further is necessary in order to place the application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned attorney at the telephone number listed below.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.
Norman F. Oblon

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 08/07)



Corwin P. Umbach, Ph.D.
Registration No. 40,211